

APPENDIX A

DOCUMENTS REQUIRING ECONOMIC ANALYSIS

The requirement to conduct economic analyses of investment projects and regulatory actions is documented in the following Executive Orders, Office of Management and Budget (OMB) Circulars and guidance, FAA policy documents, and DOT Orders and guidance.

## A. INVESTMENT PROJECTS

1. OMB CIRCULAR A-94 (Revised) (October 29, 1992): "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs"--Provides general guidance to be followed by all agencies of the Executive Branch in the conduct of benefit-cost and cost-effectiveness analyses, including measurement of benefits and costs, treatment of uncertainty, and related issues. It also provides specific guidance on the discount rates to be used in evaluating Federal programs whose benefits and costs are distributed over time. The guidance must be followed in all analyses submitted to OMB in support of legislative and budget programs in compliance with OMB Circulars No. A-11, "Preparation and Submission of Annual Budget Estimates," and No. A-19, "Legislative Coordination and Clearance." It is also applicable to economic analyses of regulatory actions required by Executive Order 12866.

The Circular applies to any analysis used to support Government decisions to initiate, renew, or expand programs or projects which would result in a series of measurable benefits or costs extending for three or more years into the future, specifically:

- benefit-cost or cost-effectiveness analysis of federal programs or policies,
- economic analysis of proposed regulatory actions,
- analysis of decisions of whether to lease or purchase, and
- asset valuation and sale analysis.

It does not apply to evaluation of decisions regarding (1) water resource projects, (2) acquisition of commercial-type services by Government or contractor operation (guidance for which is provided in OMB Circular A-76), or (3) Federal energy management programs. Except as noted below under Executive Order 12893 "Principles for Federal Infrastructure Investments" and its implementing guidance, this Circular does not apply to non-Federal recipients of loans, contracts, or grants, although these recipients are encouraged to follow its guidance when

preparing analyses in support of Federal activities. This Circular replaces and rescinds OMB Circular No. A-94, "Discount Rates to be Used in Evaluating Time-Distributed Costs and Benefits," dated March 27, 1972. It also replaces Circular No. A-104, "Evaluating Leases of Capital Assets," dated June 1, 1986, which was rescinded previously.

2. OMB CIRCULAR A-109 (April 5, 1976): "Major System Acquisitions"-- Establishes policies to be followed by executive agencies in the acquisition of major systems. These include a well defined management process with clear lines of authority, responsibility, and accountability for major system acquisitions. Among other policies set out are those requiring formulation of alternatives to achieve agency objectives, life cycle costing techniques, and assessment of anticipated benefits.
3. "Federal Aviation Administration Acquisition Management System," June 1997--Presents key elements of the Federal Aviation Administration's acquisition reform undertaken in response to Section 348 of the *1996 DOT Appropriations Act* (Public Law 104-50). This system retains key precepts of OMB Circular A-109 and tailors them to meet FAA acquisition reform principles and goals. An important element of this system is the Investment Analysis which provides information upon which to base a decision to undertake a new program. An investment analysis is similar, but broader in scope, than a benefit-cost analysis. It includes the following activities:
  - identification of alternatives--Initial requirements are used to identify all viable material and non-material candidate solutions. The principal objective is to identify commercial items, non-developmental items, or non-material solutions that are cost-effective and operationally suitable to satisfy the need and requirements.
  - analysis of alternatives--Candidate solutions are evaluated by compiling and analyzing such economic factors as life cycle cost, benefits and costs, and risk. Additional factors such as technical performance, schedule, human factors, environmental impact, radio frequency spectrum, logistics support, compatibility with NAS Architecture, regulatory and procedural impact, and operational suitability are also evaluated.
  - affordability assessment--FAA policy is to authorize a new program only if a commitment can be made to fully fund it. This assessment is intended to determine if that commitment can be made.

## B. REGULATORY ACTIONS

1. REGULATORY FLEXIBILITY ACT OF 1980 as amended by the SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT OF 1996--  
Requires agencies to publish an Initial Regulatory Flexibility Analysis, or summary of it, in the *Federal Register* for any regulatory action requiring a Notice of Proposed Rulemaking at the time the notice is published. The Act further requires that agencies publish a Final Regulatory Flexibility Analysis at the time the final rule is published. This final analysis must contain:

- a succinct statement of the need for and objectives of the rule,
- a summary of the significant issues raised by public comments in response to the initial regulatory flexibility analysis, a summary of the proposed agency's assessment of such issues, and a statement of any changes made in the proposed rule as a result of such comments,
- a description and an estimate of the number of small businesses to which the rule will apply or an explanation of why no estimate is available,
- a description of the projected reporting, record keeping and other compliance requirements of the rule, including an estimate of the classes of small entities that will be subject to the requirement and the types of professional skills necessary for the preparation of the report or record, and
- a description of the steps the agency has taken to minimize the significant economic impacts on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule, and the reasons for rejecting each of the other significant alternatives.

Preparation of a Regulatory Flexibility analysis may be avoided in those situations where the head of the agency "certifies that the rule will not, if promulgated, have (1) a significant economic impact on (2) a substantial number of (3) small entities," where small entities are defined as small business, small organizations, and small government jurisdictions.

2. EXECUTIVE ORDER 12866 (September 30, 1993): "Regulatory Planning and Review"--Identifies regulatory philosophy and principles to be followed by Federal agencies in promulgating regulations and establishes a regulatory planning mechanism coordinated by OMB. This order revokes Executive Order 12291.

The regulatory philosophy provides that:

- Federal agencies should promulgate only such regulations that are required by law, are necessary to interpret law, or are made necessary by compelling public need,
- Federal agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating, and
- Federal agencies, in choosing among alternative regulatory approaches, should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

Principles of regulation identified by this Executive Order include requirements to:

- identify the problem and its significance,
- base decisions on the best reasonably obtainable information,
- identify and assess available alternatives to direct regulation, including establishing of economic incentives to achieve desired outcomes, and providing information upon which the public can act,
- identify and assess alternative forms of regulation and to the extent feasible specify performance objectives rather specific behavior or manner of compliance,
- design regulations in the most cost-effective manner,
- tailor regulations so as to impose the least burden on society

- assess both the costs and benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon determination that benefits justify costs.

This Executive Order also provides for centralized review of regulations by OMB. Agencies are required to provide OMB with a list of planned regulatory actions, indicating those which the agency believes to be significant. Significant regulatory action is defined in Section 3 (f) of the Executive Order as “any regulatory action that is likely to result in a rule that may:

“(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

“(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

“(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligation of recipients thereof; or

“(4) Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in this Executive Order.”

This Order provides that OMB review those regulatory actions identified by the agency to OMB as significant, or determined by OMB to be significant. For each significant regulatory action the agency is required to provide OMB:

- the text of the draft regulatory action together with a description of the need for the regulatory action and an explanation as to how the proposal meets this need and
- an assessment of the benefits and costs of the proposal (including an explanation as to how the proposal is consistent with statutory mandates and, to the extent permitted by law, promotes Presidential priorities and avoids undue interference with State, local, and tribal governments).

For those significant regulatory actions that may have an annual effect on the economy of \$100 million or more or an adverse material affect on the economy, State, local, or tribal governments or communities, agencies must also provide OMB with the underlying analysis of benefits and costs quantified to the extent possible. Further, agencies must provide an assessment of the benefits and costs of reasonably feasible alternatives to the planned regulation and an explanation as to why the planned action is preferable to the alternatives.

3. “OMB Economic Analysis of Federal Regulation Under Executive Order 12866” (January 11, 1996)--Provides guidance for meeting the economic analysis requirements of Executive Order 12866 as well as those of the Unfunded Mandates Reform Act of 1995 and the Regulatory Flexibility Act. In accordance with the regulatory philosophy and principles of the Executive Order, it indicates that an Economic Analysis of proposed or existing regulations should inform decisionmakers of the consequences of alternative actions. In particular, it should contain information allowing decisionmakers to determine that:

- there is adequate information indicating the need for and consequences of the proposed action,
- potential benefits to society justify the potential costs, recognizing that not all benefits and costs can be described in monetary or even in quantitative terms, unless a statute requires another regulatory approach.
- the proposed action will maximize net benefits to society, unless a statute requires another regulatory approach,
- where a statute requires a specific regulatory approach, the proposed action will be the most cost-effective, including reliance on performance objectives to the extent feasible, and
- agency decisions are based on the best reasonably obtainable scientific, technical, economic and other information.

It requires that “preliminary and final Economic Analyses of economically “significant” rules (as defined in Section 3(f)(1) of the executive Order) should contain three elements:

- a statement of the need for the proposed action,
- an examination of alternative approaches, and

- an analysis of benefits and costs.”

The document also identifies and describes best practices for the conduct of economic analyses including rationales for regulation, framing of alternative approaches, and appropriate measurement of benefits and costs including treatment of risk and uncertainty.

4. ORDER DOT 2100.5 (May 22, 1980): "Policies and Procedures for Simplification, Analysis, and Review of Regulations"--Requires that a regulatory analysis be conducted for essentially all regulations for which an economic analysis (per "OMB Economic Analysis of Federal Regulation under Executive Order 12866") is required and that a regulatory evaluation be conducted for all other regulations. It defines a regulatory analysis as containing "(1) a succinct statement of the problem and issues that make the regulation significant; (2) a description of the major alternative ways of dealing with the problem that were considered by the initiating office; (3) an analysis of the economic and any other relevant consequences of each of these alternatives; and (4) a detailed explanation of the reason for choosing one alternative over the others." A regulatory evaluation "includes an analysis of the economic consequences of the proposed regulation quantifying to the extent practicable, its estimated cost to the private sector, consumers, Federal, state, and local governments, as well as its anticipated benefits and impact."

#### C. FEDERAL INFRASTRUCTURE PROJECTS INCLUDING DIRECT SPENDING AND GRANTS

1. EXECUTIVE ORDER 12893 (January 31, 1994): "Principles for Federal Infrastructure Investments"--Instructs Federal agencies to conduct a systematic analysis of benefits and costs of infrastructure investments. It also requires Federal agencies to conduct periodic reviews of management practices, including operations and maintenance activities, contracting practices, and pricing policies; to seek private sector participation in infrastructure investment and management; and to promote efficient use of Federal infrastructure funds by encouraging State and local recipients of Federal grants to implement planning and information management systems that support the principles of the order. The Order required all Federal agencies to submit initial plans to implement its principles no later than March 15, 1994. It applies to major infrastructure investment and grant programs--defined as those with annual budgetary resources in excess of \$50 million--beginning with the fiscal year 1996 OMB budget submissions. The order also applies to authorization and reauthorization requests submitted for OMB approval beginning March 15, 1994.

The Order requires that the analysis of benefits and costs be conducted in accordance with OMB circular A-94 and:

- quantify and monetize benefits and costs to the maximum extent practicable.
  - measure and appropriately discount benefits and costs over the full life cycle of each project.
  - recognize and address uncertainty through appropriate quantitative and qualitative assessments.
  - compare a comprehensive set of options that include, among other things, managing demand, repairing facilities, and expanding facilities, and
  - consider not only quantifiable measures of benefits and costs but also qualitative measures reflecting values that are not readily quantified.
2. “Guidance on Executive Order No. 12893, Principles for Federal Infrastructure Investments”--Provides implementation guidance as required by Executive Order 12893. It indicates that the Executive Order covers spending for transportation, water resources, energy, and environmental protection. For FAA, it specifically applies to Facilities and Equipment and Grants-in-Aid for Airports. It reiterates that all analyses provided shall be consistent with OMB Circular A-94 including the use of a base rate discount rate--7 percent when the Executive Order was issued--as specified by A-94.
3. Title 49, United States Code--Codifies certain U.S. Transportation Laws. Section 47115(d) specifies that, in selecting projects for discretionary grants or Letters of Intent (LOI) to preserve and enhance capacity at airports, the Secretary of Transportation must consider the projects benefits and costs. (An LOI is an announcement by the Secretary of Transportation of the intention to obligate funds for certain airport development projects in advance of an AIP grant, subject to the availability of funds.) It should be noted that FAA does not have statutory authority to require airport authorities receiving AIP formula monies to conduct benefit-cost analyses. However, FAA provides technical assistance to airports seeking to estimate the capacity, delay, environmental, or other impacts of airport investments.

4. “Policy for Letter of Intent Approvals under the Airport Improvement Program,” *Federal Register*, Vol. 59, No. 209, October 31, 1994:--clarifies FAA’s policies on reviewing and analyzing requests for LOI’s under AIP at primary or reliever airports for airside capacity development projects. It indicates that FAA will consider three factors in reviewing requests for LOI’s: the project’s effects on overall national air transportation capacity; project benefits and costs; and the airport sponsor’s financial commitment to the project. The policy further requires that a project must have present value benefits which exceed present value costs to be considered for an LOI.
5. “Policy Regarding Revision of Selection Criteria for Discretionary Airport Improvement Program Grant Awards,” *Federal Register*, Vol. 59, No. 209, October 31, 1994:--Requires benefit-cost analysis for any discretionary capacity AIP grant application which is expected to equal or exceed \$10 million (subsequently lowered to \$5 million--see item 6 below) in AIP grant funds over the life of the project. Although FAA had used a “Priority System” for ranking Airport Improvement Program (AIP) applications for grants for many years, it had not employed benefit-cost analysis. To implement Executive Order 12893 and comply with guidance provided in Congressional hearings regarding the use of economic analysis in evaluating Federal investment in airport infrastructure, FAA adopted the benefit-cost requirement for all new projects to be considered for AIP grant awards in fiscal year 1995 and subsequent years.
6. “Policy and Guidance Regarding Benefit-Cost Analysis for Airport Capacity Projects Requesting Discretionary Airport Improvement Program Grant Awards and Letters of Intent,” *Federal Register*, Vol. 62, No. 121, June 24, 1997--Issues interim guidance--published in “FAA Airport Benefit-Cost Analysis Guidance,” June 1997--for conducting airport benefit-cost analysis for capacity projects seeking AIP grants or LOI’s. This notice provides that a benefit-cost analysis accompany all AIP grant applications for \$5 million or more in AIP capacity discretionary funds for grants commencing in FY-1998 and for any request for an LOI to be issued in FY-1997 or thereafter. Although FAA staff had initially conducted many of the benefit-cost analyses completed in support of such projects under the Policy Notices issued in 1994, this notice places responsibility for conducting these analyses upon the airport sponsor. Sponsors are encouraged to perform the analysis during the development of their airport master plans, in conjunction with environmental studies, or concurrently with other project formulation activities. FAA is responsible for reviewing the analyses as part of the AIP request evaluation process, may request further details, and may undertake an independent benefit-cost analysis.